IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF ILLINOIS

UNITED STATES OF AMERICA,)	
Plaintiff,)	
v.)	Civil Action No.
ILLINOIS POWER COMPANY,)	
Defendant.)	
)	

COMPLAINT

The United States of America, by authority of the Attorney General of the United States and through the undersigned attorneys, acting at the request of the Administrator of the United States Environmental Protection Agency ("EPA"), alleges:

NATURE OF THE ACTION

1. This is a civil action brought against the Illinois Power Company, ("the Defendant") pursuant to Sections 113(b)(2) and 167 of the Clean Air Act ("the Act"), 42 U.S.C. § 7413(b)(2) and 7477, for injunctive relief and the assessment of civil penalties for violations of the Prevention of Significant Deterioration ("PSD") provisions and New Source Performance Standards ("NSPS") of the Act, 42 U.S.C. §§ 7470-92 and 7411, respectively. Numerous times, Defendant modified, and thereafter operated, its electric generating units at the Baldwin Power Station coal-fired electricity generating power plant in Randolph County, Illinois without first obtaining appropriate permits authorizing construction of modifications at these units and

without installing the best available control technology to control emissions of nitrogen oxides, sulfur dioxide, and particulate matter, as the Act requires.

- 2. As a result of Defendant's operation of the power plant following these unlawful modifications and the absence of appropriate controls, massive amounts of sulfur dioxide, nitrogen oxides, and particulate matter have been, and still are being, released into the atmosphere aggravating air pollution locally and far downwind from this plant. Defendant's violations, alone and in combination with similar violations at other coal-fired electric power plants, have been significant contributors to some of the most severe environmental problems facing the nation today. An order of this Court directing this Defendant, forthwith, to install and operate the best available technology to control these pollutants in conjunction with orders being sought in similar cases involving coal fired electrical power plants in the midwest and southern United States being filed by the United States concurrent with the filing of this complaint, will produce an immediate, dramatic improvement in the quality of air breathed by millions of Americans. It will reduce illness, protect lakes and streams from further degradation due to the fallout from acid rain, and allow the environment to restore itself following years, and in some cases decades, of illegal emissions.
- 3. Sulfur dioxide, nitrogen oxides, and particulate matter when emitted into the air can each have adverse environmental and health impacts. Electric utility plants collectively account for about 70 percent of annual sulfur dioxide emissions and 30 percent of nitrogen oxides emissions in the United States. Sulfur Dioxide interacts in the atmosphere to form sulfate aerosols, which may be transported long distances through the air. Most sulfate aerosols are particles that can be inhaled. In the eastern United States, sulfate aerosols make up about 25

percent of the inhalable particles and according to recent studies, high levels of sulfate aerosols are associated with increased sickness and mortality from lung disorders, such as asthma and bronchitis. Lowering sulfate aerosol levels, lower emissions from electric utility plants may significantly reduce the incidence and the severity of asthma and bronchitis and associated hospital admissions and emergency room visits.

- 4. Nitrogen oxides ("NO_x") are major producers of ground level ozone, which scientists have long recognized as being harmful to human health. NO_x, transformed into ozone, may cause decreases in lung function (especially among children who are active outdoors) and respiratory problems leading to increased hospital admissions and emergency room visits.

 Ozone may inflame and possibly cause permanent damage to people's lungs. NO_x is also transformed into nitrogen dioxide (NO₂), a dangerous pollutant that can cause people to have difficulty breathing by constricting lower respiratory passages; it may weaken a person's immune system, causing increased susceptibility to pulmonary and other forms of infections. While children and asthmatics are the primary sensitive populations, individuals suffering from bronchitis, emphysema, and other chronic pulmonary diseases have a heightened sensitivity to NO₂ exposure. NO_x also reacts with other pollutants and sunlight to form photochemical smog, which in turn contributes to haze and reduces visibility.
- 5. SO₂ and NO_x interact in the atmosphere with water and oxygen to form nitric and sulfuric acids, commonly known as acid rain. Acid rain, which also comes in the form of snow or sleet, "acidifies" lakes and streams thereby making them uninhabitable by aquatic life and contributes to damage of trees at high elevations. Acid rain accelerates the decay of building materials and paints, including irreplaceable buildings, statues, and sculptures that are part of our

nation's cultural heritage. SO₂ and NO_x gases and their particulate matter derivatives, sulfates and nitrates, contribute to visibility degradation and impact public health. In this civil action and in other civil actions filed concurrent with it, the United States intends to reduce dramatically the amount of SO₂ and NO_x that certain electric utility plants have been illegally releasing into the atmosphere. If the injunctive relief requested by the United States is granted in this case, and in others being filed concurrent with it, many acidified lakes and streams will improve so that they may once again support fish and other forms of aquatic life. Visibility will improve, allowing for increased enjoyment of scenic vistas throughout the eastern half of our country. Stress to our forests from Maine to Georgia will be reduced. Deterioration of our historic buildings and monuments will be slowed. In addition, reductions in SO₂ and NO_x will reduce sulfates, nitrates, and ground level ozone, leading to improvements in public health.

6. Particulate matter is the term for solid or liquid particles found in the air. Smaller particulate matter of a diameter of 10 micrometers or less is referred to as PM 10. Power plants are a major source of particulate matter ("PM"). Breathing PM at concentrations in excess of existing ambient air standards may increase the chances of premature death, damage to lung tissue, cancer, or respiratory disease. The elderly, children, and people with chronic lung disease, influenza, or asthma, tend to be especially sensitive to the effects of PM. PM can also make the effects of acid rain worse, reducing visibility and damaging man-made materials. Reductions in PM illegally released into the atmosphere by the defendant and others will significantly reduce the serious health and environmental effects caused by PM in our atmosphere.

JURISDICTION AND VENUE

- 7. This Court has jurisdiction of the subject matter of this action pursuant to Sections 113(b) and 167 of the Act, 42 U.S.C. §§ 7413(b) and 7477, and pursuant to 28 U.S.C. §§ 1331, 1345, and 1355.
- 8. Venue is proper in this District pursuant to Sections 113(b) of the Act, 42 U.S.C. § 7413(b), and 28 U.S.C. § § 1391(b),(c), and 1395(a), because the Defendant resides in this District, the violations occurred in this District, and the Baldwin Power Station is located in this District.

NOTICES

9. The United States is providing notice of the commencement of this action to the State of Illinois as required by Section 113(b) of the Act, 42 U.S.C. § 7413(b).

THE DEFENDANT

- 10. Defendant, Illinois Power Company ("Illinois Power"), owns and is an operator of the Baldwin Power Station ("Baldwin Station") coal fired electric generation plant in Randolph County, Illinois. Baldwin Station generates electricity from three steam generating boilers which are designated Baldwin Unit 1 ("Unit 1"), Baldwin Unit 2 ("Unit 2") and Baldwin Unit 3 ("Unit 3").
- 11. The Defendant is a "person" within the meaning of Section 302(e) of the Act, 42 U.S.C. § 7602(e).

STATUTORY BACKGROUND

12. The Clean Air Act is designed to protect and enhance the quality of the nation's air so as to promote the public health and welfare and the productive capacity of its population.

Section 101(b)(1) of the Act, 42 U.S.C. § 7401(b)(1).

The National Ambient Air Quality Standards

- 13. Section 109 of the Act, 42 U.S.C. § 7409, requires the Administrator of EPA to promulgate regulations establishing primary and secondary national ambient air quality standards ("NAAQS" or "ambient air quality standards") for those air pollutants ("criteria pollutants") for which air quality criteria have been issued pursuant to section 108, 42 U.S.C. §7408. The primary NAAQS are to be adequate to protect the public health, and the secondary NAAQS are to be adequate to protect the public health, and the secondary NAAQS are associated with the presence of the air pollutant in the ambient air.
- 14. Under Section 107(d) of the Act, 42 U.S.C. § 7407(d), each state is required to designate those areas within its boundaries where the air quality is better or worse than the NAAQS for each criteria pollutant, or where the air quality cannot be classified due to insufficient data. An area that meets the NAAQS for a particular pollutant is an "attainment" area. An area that does not meet the NAAQS is a "nonattainment" area. An area that cannot be classified due to insufficient data is "unclassifiable."
- 15. At times relevant to this complaint, Baldwin Station was located in an area that had been classified as attainment or unclassifiable for one or more of the following pollutants, NO_x , SO_2 , PM, and PM10.

The Prevention of Significant Deterioration Requirements

16. Part C of the Act, 42 U.S.C. §§ 7470-7492, sets forth requirements for the prevention of significant deterioration ("PSD") of air quality in those areas designated as either attaining the NAAQS standards. These requirements are designed to protect public health and welfare, to assure that economic growth will occur in a manner consistent with the preservation of existing clean air resources and to assure that any decision to permit increased air pollution is made only

after careful evaluation of all the consequences of such a decision and after public participation in the decision making process. These provisions are referred to herein as the "PSD program."

17. Section 165(a) of the Act, 42 U.S.C. § 7475(a), among other things, prohibits the construction and operation of a "major emitting facility" in an area designated as attainment unless a permit has been issued that comports with the requirements of Section 165, including the requirement that the facility install the best available control technology for each pollutant subject to regulation under the Act that is emitted from the facility. Section 169(1) of the Act, 42 U.S.C. § 7479(1), designates fossil-fuel fired steam electric plants of more than two hundred and fifty million British thermal units per hour heat input and that emit or have the potential to emit one hundred tons per year or more of any pollutant to be "major emitting facilities."

18. Section 169(2)(C) of the Act, 42 U.S.C. § 7479(2)(C), defines "construction" as including "modification" (as defined in Section 111(a) of the Act). "Modification" is defined in Section 111(a) of the Act, 42 U.S.C. § 7411(a), to be "any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted."

New Source Performance Standards

19. Section 111(b)(1)(A) of the Act, 42 U.S.C. § 7411(b)(1)(A), requires the Administrator of U.S. EPA to publish a list of categories of stationary sources that emit or may emit any air pollutant. The list must include any categories of sources which are determined to cause or significantly contribute to air pollution which may endanger public health or welfare.

- 20. Section 111(b)(1)(B) of the Act, 42 U.S.C. § 7411(b)(1)(B), requires the Administrator of U.S. EPA to promulgate regulations establishing federal standards of performance for new sources of air pollutants within each of these categories. "New sources" are defined as stationary sources, the construction or modification of which is commenced after the publication of the regulations or proposed regulations prescribing a standard of performance applicable to such source. 42 U.S.C. § 7411(a)(2). These standards are known as New Source Performance Standards ("NSPS")
- 21. Section 111(e) of the Act, 42 U.S.C. § 7411(e), prohibits an owner or operator of a new source from operating that source in violation of a NSPS after the effective date of the applicable NSPS to such source.
- 22. Pursuant to Sections 111 and 114 of the Act, 42 U.S.C. §§ 7411, 7414, EPA promulgated 40 C.F.R. Part 60, Subpart A, §§ 60.1 60.19, which contains general provisions regarding NSPS.
- 23. 40 C.F.R. § 60.1 states that the provisions of 40 C.F.R. Part 60 apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the publication in Part 60 of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.
- 24. 40 C.F.R. § 60.2 defines "affected facility" as any apparatus to which a standard is applicable.
- 25. Pursuant to Section 111(b)(1)(A) of the Act, 42 U.S.C. § 7411(b)(1)(A), at 40 C.F.R. §§ 60.40a-49a (Subpart Da) EPA has identified electric utility steam generating units as one

category of stationary sources that cause, or contribute significantly to, air pollution that may reasonably be anticipated to endanger public health or welfare.

- 26. EPA's general NSPS provisions, referred to in paragraph 22, above, apply to owners or operators of any stationary source that contains an "affected facility" subject to regulation under 40 C.F.R. Part 60. EPA has also promulgated NSPS for various industrial categories, including electric utility steam generating units. NSPS requirements for electric utility steam generating units for which construction or modification is commenced after September 18, 1978, are codified at 40 C.F.R. Part 60, Subpart Da, §§ 60.40a-49a.
- 27. The "affected facilities" to which Subpart Da applies are each "electric utility steam generating unit" that is capable of combusting more than 73 megawatts (250 million Btu/hour) heat input of fossil fuel (either alone or in combination with any other fuel) and for which construction or modification is commenced after September 18, 1978. 40 C.F.R. § 60.40a.
- 28. Under Subpart Da, "steam generating unit" means any furnace, boiler, or other device, other than nuclear steam generators, used for combusting fuel for the purpose of producing steam, including fossil-fuel-fired steam generators associated with combined cycle gas turbines. 40 C.F.R. § 60.41a.
- 29. An "electric utility steam generating unit", under Subpart Da, means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 megawatt ("MW") electrical output to any utility power distribution for sale. 40 C.F.R. § 60.41a.
- 30. "Modification" under NSPS is defined as "any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to

which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted." 40 C.F.R. § 60.2. Under NSPS, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of Section 111 of the Act, 42 U.S.C. § 7411. 40 C.F.R. § 60.14(a).

- 31. Under 40 C.F.R. § 60.14, upon modification, an existing facility becomes an "affected facility" for which the applicable NSPS must be satisfied.
- 32. Section 111(e) of the Act, 42 U.S.C. § 7411(e), prohibits the operation of any new source in violation of an NSPS applicable to such source. Thus, a violation of an NSPS is a violation of Section 111(e) of the Act.
- 33. Pursuant to 40 C.F.R. § 60.7(a)(4), any owner or operator of an affected facility subject to NSPS must furnish written notification to EPA of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies postmarked 60 days or as soon as practicable before the change is commenced with information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change.
- 34. Pursuant to 40 C.F.R. § 60.8, the owner or operator of an affected facility that is an electric utility steam generating unit must conduct a performance test in accordance with 40 C.F.R.

§ 60.48a within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and furnish EPA a written report of the results of such performance test..

35. Pursuant to 40 C.F.R. §§ 60.42a(a), 60.43a(a), and 60.44a(a), the owner or operator of an electric utility steam generating unit subject to Subpart Da, may not discharge into the atmosphere from the affected facility any gases which contain PM, SO2, or NOx, respectively, in excess of the applicable limitations.

ENFORCEMENT PROVISIONS

- 36. Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3), provides that "Except for a requirement or prohibition enforceable under the preceding provisions of this subsection, whenever on the basis of any information available to the Administrator, the Administrator finds that any person has violated, or is in violation of, any other requirement or prohibition of this subchapter . . . the Administrator may . . . bring a civil action in accordance with subsection (b) of this section"
- 37. Section 113(b)(2) of the Act, 42 U.S.C. § 7413(b)(2), authorizes the Administrator to initiate a judicial enforcement action for a permanent or temporary injunction, and/or for a civil penalty of up to \$25,000 per day of violation for violations occurring on or before January 30, 1997 and \$27,500 per day for each such violation occurring after January 30, 1997, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461, as amended by 31 U.S.C. § 3701, against any person whenever such person has violated, or is in violation of, requirements of the Act other than those specified in Section 113(b)(1), 42 U.S.C. § 7413(b)(1), including violations of Section 165(a), 42 U.S.C. § 7475(a) and Section 111, 42 U.S.C. § 7411.

- 38. Section 167 of the Act, 42 U.S.C. § 7477, authorizes the Administrator to initiate an action for injunctive relief, as necessary to prevent the construction, modification or operation of a major emitting facility which does not conform to the PSD requirements in Part C of the Act.
- 39. At all times pertinent to this civil action, Defendant was and is the owner and operator of Baldwin Station and each of its three boilers, designated Units 1, 2 and 3.
- 40. At all times pertinent to this civil action, Baldwin Station was a "major emitting facility" and a "major stationary source," within the meaning of the Act for NO_x , SO_2 , and PM. Units 1 and 2 are "affected sources" that are subject to the requirements of NSPS.

FIRST CLAIM FOR RELIEF

(PSD Violations: Modifications at Baldwin Station)

- 41. Paragraphs 1 through 40 are realleged and incorporated herein by reference.
- 42. At various times, Defendant commenced construction of modifications, as defined in the Act, at the Baldwin Station. These modifications included, but are not limited to, these modifications or combination of modifications: (1) replacing a cold end air heater section for Unit 1 by replacing all air heater tubes in1985 and 1990; (2) replacing 14 cyclones and front and rear furnace walls, among other things, for Unit 1 in 1992; (3) replacing a cold-end air heater section for Unit 2 by replacing all air heater tubes in 1988 and1991; (4) replacing the entire boiler floor for Unit 2 in 1991, including the inlet headers, floor tubing, and the lower 3 feet of the front and rear walls; (5) a complete change-out of the economizer for Unit 3 in1982; (6) replacing the Unit 3 reheater in 1994; and (7) the addition of 20,000 square feet of secondary superheater surface for Unit 3 in 1994. Defendant constructed additional "modifications" to its plant beyond those described in this paragraph.

- 43. Defendant violated and continues to violate Section 165(a) and 167 of the Act, 42 U.S.C. §§ 7475(a) and 7477, by, among other things, undertaking such "modifications" and continuing to operate its facility without (1) obtaining a PSD permit; and (2) applying best available control technology for NO_x, SO₂, and PM, as required.
- 44. Unless restrained by an order of this Court, these and similar violations of the Act will continue.
- 45. As provided in Section 113(b)(2) of the Act, 42 U.S.C. § 7413(b)(2), and Section 167 of the Act, 42 U.S.C. § 7477, the violations set forth above subject Defendant to injunctive relief and civil penalties of up to \$25,000 per day for each violation prior to January 30, 1997, and \$27,500 per day for each such violation after January 30, 1997, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461, as amended by 31 U.S.C. § 3701.

SECOND CLAIM FOR RELIEF

(NSPS violations: Units 1 and 2, Cold End Air Heater Tube Replacements)

- 46. Paragraphs 1 through 40 are realleged and incorporated herein by reference.
- 47. Defendant is the "owner or operator," within the meaning of Section 111(a)(5) of the Act, 42 U.S.C. § 7411(a)(5), and 40 C.F.R. § 60.2, of two electric utility steam generating units within the meaning of 40 C.F.R. §§ 60.40(a) and 60.41(a), designated Units 1 and 2, located at Baldwin Station.
- 48. Unit 1 at Baldwin Station is an "affected facility" under Subparts A and Da of NSPS and is subject to the NSPS, including provisions of Subpart A and Da of the NSPS.
- 49. During 1990, Defendant replaced portions of the cold air heater tubes in Unit 1. The replacement was completed on May 31, 1990. The replacement increased the gross megawatt

generation capacity at Unit 1, and the maximum hourly emissions rate of PM, NOX, and SO2 from Unit 1 above the maximum hourly emissions previously achieved.

- 50. Unit 2 at Baldwin Station is an "affected facility" under Sbparts A and Da of NSPS and is subject to the NSPS, including provisions of Subpart A and Da of the NSPS.
- 51. During the Spring of 1988, Defendant replaced portions of Unit 2's cold end air heater tubes. The replacement increased the gross megawatt generation capacity at Unit 2 and the maximum hourly emission rate of SO₂, NO_x, and PM from Unit 2 above the maximum hourly emissions previously achieved.
- 52. The replacement activities undertaken in connection with Units 1 and 2 constituted "modifications" of "affected facilities" as those terms are defined in the NSPS. 40 C.F.R. §§ 60.2 and 60.14(a). The replacement activities took place after September 18, 1978.
- 53. With regard to Unit 1's replacement activities, Defendant failed to furnish written notification in accordance with the requirements of 40 C.F.R. §60.7(a) (4), of any physical or operational change to the Unit which may increase the emission rate of any air pollutant to which a standard applies postmarked 60 days or as soon as practicable before the change is commenced with information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change.
- 54. With regard to Unit 1, Defendant failed to conduct a performance test in accordance with the procedures required by § 60.48a within 60 days after achieving the maximum production rate at Unit 1 after the replacement (or within 180 days after initial startup of Unit 1)

after the replacement, and to furnish a written report of the results of such performance test to EPA in violation of 40 C.F.R. § 60.8.

- 55. With regard to Unit 2's replacement activities, Defendant failed to furnish a written notification of the results of a performance test to EPA in accordance with the requirements of 40 C.F.R. § 60.7(a)(4) of any physical or operational change to the unit which may increase the emission rate of any air pollutant to which a standard applies postmarked 60 days as soon as practicable before the change is commenced with information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change.
- 56. Defendant failed to comply and continues to fail to comply with the NSPS emissions requirements for PM, SO2, and NO_x after the replacement activities in violation of 40 C.F.R. § 60.42a(a), 40 C.F.R. § 60.43a(a), and 40 C.F.R. § 60.44a(a).
- 57. Each day that Defendant fails to comply with each of the NSPS requirements described in this Complaint, constitutes a violation of the federal NSPS regulations, and the Act.
- 58. Pursuant to Section 113(b) of the CAA, 42 U.S.C. § 7413(b), Defendant is subject to injunctive relief and civil penalties up to \$25,000 per day of violation for violations occurring on or before January 30,1997 and \$27,500 per day for each such violation occurring after January 30, 1997 pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461, as amended by 31 U.S.C. § 3701. Unless enjoined by this Court, Defendant will continue to violate the requirements of the NSPS and the Act.

PRAYER FOR RELIEF

WHEREFORE, based upon all the allegations contained in paragraphs 1 through 54 above, the United States of America requests that this Court:

- Permanently enjoin the Defendant from operating Units 1, 2 and 3 of Baldwin
 Station, including the construction of future modifications, except in accordance with the Clean
 Air Act and any applicable regulatory requirements;
- 2. Order Defendant to remedy its past violations by, among other things, requiring Defendant to install, as appropriate, the best available control technology on Units 1, 2 and 3 at Baldwin Station for each pollutant subject to regulation under the Clean Air Act;
- 3. Order Defendant to apply for a permit that is in conformity with the requirements of the PSD program;
 - 4. Order Defendant to comply with the NSPS provisions of the Act;
- 5. Order Defendant to conduct audits of its operations to determine if any additional modifications have occurred which would require it to meet the requirements of PSD and NSPS and report the results of these audits to the United States;
- 6. Order defendant to take other appropriate actions to remedy, mitigate, and offset the harm to public health and the environment caused by the violations of the Clean Air Act alleged above;
- 7. Assess a civil penalty against Defendant of up to \$25,000 per day for each violation of the Clean Air Act and applicable regulations, and \$27,500 per day for each such violation after January 30, 1997;
 - 8. Award Plaintiff its costs of this action; and
 - 9. Grant such other relief as the Court deems just and proper.

Respectfully Submitted,

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